

WHAT IS CLAIMED IS:

1. A bagless vacuum cleaner comprising:

a brush;

a driving motor for generating a suction force;

5 a main body including said driving motor and a filter mounting;

a dust suction tube having one end connected to said filter mounting and the other end connected to said brush;

a filter assembly mounted within said filter mounting to filter out dust from external air drawn into said main body through said dust suction tube and said brush; and

10 a main body cover coupled with said filter assembly to facilitate the insertion and removal of said filter assembly into and from said filter mounting and being capable of locking to said main body.

2. The bagless vacuum cleaner according to claim 1, wherein said filter assembly

15 further comprises:

a filter housing having an opening;

a first filter unit connected within said filter housing; and

a second filter unit placed between an endwall of said filter housing and said first filter unit.

3. The bagless vacuum cleaner according to claim 2, wherein said filter housing includes an engagement loop connected to said main body cover and a safety lever for preventing said filter assembly from being mounted into said filter mounting when said first filter unit is not fully connected within said filter housing.

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4. The bagless vacuum cleaner according to claim 2, wherein said filter housing further comprises an opening cover for selectively opening and closing said opening.

5. The bagless vacuum cleaner according to claim 3, wherein said filter housing
10 further comprises an opening cover for selectively opening and closing said opening.

6. The bagless vacuum cleaner according to claim 2, wherein said second filter unit comprises a second filter, a second filter holder for supporting said second filter, and a filter net enclosing said second filter within said second filter holder.

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7. The bagless vacuum cleaner according to claim 2, wherein said first filter unit further comprises a first filter and a first filter holder for supporting said first filter.

8. A bagless vacuum cleaner comprising:

a brush;

a driving motor for generating a suction force;

a main body including said driving motor and a filter mounting;

5 a dust suction tube having one end connected to said filter mounting and the other end connected to said brush;

a cyclone dust collector provided in said dust suction tube for separating said dust from air drawn into the collector by circulating the air within the cyclone dust collector;

10 a filter assembly mounted into said filter mounting and comprising a filter housing, a first filter unit and a second filter unit to filter out dust and dirt from external air drawn into said main body through said dust suction tube and said brush; and

a main body cover having first, second and third hooks, each of which are shaped and configured to engage said filter assembly, and a handle for facilitating the selective insertion and removal of said filter assembly into and from said filter mounting.

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9. The bagless vacuum cleaner according to claim 8, wherein said handle of said main body cover has at least one hook which can be locked into corresponding locking grooves formed on said main body.

10. The bagless vacuum cleaner according to claim 8, wherein said filter assembly further comprises a safety lever.

11. The bagless vacuum cleaner according to claim 8, wherein said filter housing of
5 said filter assembly includes an opening, which exactly corresponds with said dust suction tube, and an opening cover for selectively opening and closing said opening.

12. The bagless vacuum cleaner according to claim 9, wherein said filter housing of
said filter assembly includes an opening, which corresponds with said dust suction tube, and an
10 opening cover for selectively opening and closing said opening.

13. The bagless vacuum cleaner according to claim 8, wherein said filter housing of
said filter assembly includes an engagement loop, which is shaped and configured to engage with
said first hook of said main body cover, and a plurality of locking jaws, which can be engaged
15 with said second and third hooks of said main body cover.

14. A bagless vacuum cleaner comprising:

a brush;

a driving motor for generating a suction force;

a main body including said driving motor and a filter mounting having a filter guide;

a dust suction tube having one end connected to said filter mounting and the other end connected to said brush;

a cyclone dust collector provided in said dust suction tube to remove dust from air drawn
5 into the cyclone dust collector by circulating the air within the cyclone dust collector;

a filter assembly mounted within said filter mounting and comprising a filter housing and
a first filter unit locked into said filter housing; and

a main body cover detachable from said filter assembly, said main body being provided
with a handle.

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15. The bagless vacuum cleaner according to claim 14, wherein said handle of said
main body cover has a plurality of hooks which can be locked into corresponding locking grooves
formed on said main body.

15 16. The bagless vacuum cleaner according to claim 14, wherein said filter assembly
includes a support projection and at least one locker capable of holding a tool for cleaning said filter
on one side thereof.